

REMARKS

Status of the Claims

Claims 1-5, 7-11, 13 and 14 are pending in this application. Claims 6 and 12 have been canceled. Claim 14 has been added. Support for new claim 14 is found in paragraph 0019. Claims 1 and 8 have been amended to recited that the device is for simultaneous scanning and analysis wherein the output device comprises at least one set of parameters for directly reading the electrical signal detected by the photomultiplier tube without converting the electrical signal into image data. Support for these amendments is found in paragraphs 0005, 0006, 0020 and 0021. Claim 7 and 11 have been amended to change dependency. No new matter has been added by the above claim amendments.

Drawing Corrections

The Examiner objects to Figures 1 and 2 because they are not labeled as "Prior Art". Applicants submit herewith replacement sheets for Figures 1 and 2 clearly marked "Prior Art". As such, this objection should be withdrawn.

The Examiner also objects to the drawings because certain references characters are not mentioned in the specification. Applicants amend the specification to identify descriptor 4 for

Figure 2 and to correct descriptor 2 for the reader to be 4. As such, this objection should also be withdrawn.

Objection to Specification

The Examiner objects to the specification for improper grammar and syntax. Applicants submit herewith a Substitute Specification (clean copy and marked up version). The Substitute Specification does not contain any new matter. As such, this objection should be withdrawn.

Rejections under 35 USC 102

The Examiner rejects claims 1-3, 8 and 9 over Applicants' disclosure of admitted prior art. Applicants traverse the rejection and respectfully request the withdrawal thereof.

Applicants submit that the presently claimed invention is novel over the conventional biochip scanner described in the "Prior Arts" section of the specification. The present invention is directed to a biochip scanner device for simultaneous scanning and analysis comprising a light source, which emits a light beam; a light processing unit, which focuses the light beam onto a biochip to excite fluorescence from a fluorescent target on the biochip; a filter, which filters off the light beam from a light source; a photomultiplier tube, which detects and converts the fluorescence

into an electrical signal; and an output device, which comprises at least one set of parameters for directly reading the electrical signal detected by the photomultiplier tube without converting the electrical signal into image data. The present invention is also directed to a biochip scanner device for simultaneous scanning and analysis comprising a light source, which emits a light beam; a beam splitter for redirecting the light beam through a focusing lens, which focuses the light beam onto the biochip and excites fluorescence from a fluorescent target on the biochip; a filter, which filters off the light beam from a light source; a photomultiplier tube, which detects and converts the fluorescence into an electrical signal; and an output device, which comprises at least one set of parameters for directly reading the electrical signal detected by the photomultiplier tube without converting the electrical signal into image data.

The admitted prior art from the "Prior Art" section of the specification describes the conventional biochip scanner. The conventional biochip scanner is not equivalent to the present invention. The scanner of the present invention is able to simultaneously scan and analyze the samples on the biochip. The scanner of the present invention is also able to read the electrical signal from the photomultiplier tube without having to

convert the electrical signal into image data as with the conventional scanner.

As such, Applicants submit that the conventional scanner described in the specification fails to embody all of the elements of the present invention. As such, Applicants submit that the description in the specification does not anticipate the present invention. Thus, this rejection should be withdrawn.

Rejection under 35 USC 103(a)

The Examiner rejects claims 4-7 and 10-13 as obvious over the combination of the description of the conventional scanner in the "Prior Arts" section of the specification and Kuwabata et al. Published U.S. Application 2003/0020022 (Kuwabata '022). Applicants traverse the rejection and respectfully request the withdrawal thereof.

Applicants submit that no prima facie case of obviousness has been established since the combination cited by the Examiner fails to disclose or suggest all of the elements of the present invention.

Examiner relies on the disclosure of the conventional scanner from the specification. To supplement this disclosure, the Examiner relies on Kuwabata '022 for disclosing a two dimensional

support stage for scanning in two dimensions with computer controls and displaying means to eliminate manual movement.

Applicants submit that Kuwabata '022 fails to compensate for the deficiencies in the prior art description in the specification. Kuwabata '022 fails to disclose a scanning device for simultaneous scanning and analysis wherein the output device comprises at least one set of parameters for directly reading the electrical signal detected by the photomultiplier tube without converting the electrical signal into image data. As such, Applicants submit that the combination cited by the Examiner fails to disclose or suggest all of the elements of the presently claimed invention. Thus, this rejection should be withdrawn.

Conclusion

As Applicants have addressed and overcome all rejections in the Office Action, Applicants respectfully request that the rejections be withdrawn and that the claims be allowed.

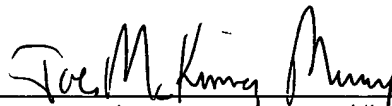
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Kecia Reynolds (Reg. No. 47,021) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a two (2) month extension of time for filing a reply in connection with the present application, and the required fee of \$225.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By 
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Attachment(s): Clean Copy of Substitute Specification
Marked-up Copy of Substitute Specification
Replacement Drawing Sheets (1 and 2)
Check No. 90319749

AMENDMENTS TO THE DRAWINGS

Attached hereto are two (2) sheet(s) of corrected drawings that comply with the provisions of 37 C.F.R. § 1.84. The corrected drawings incorporate the following drawing changes and are labeled "Replacement Sheet" as required by the Examiner:

Figures 1 and 2 have been labeled as Prior Art.

It is respectfully requested that the corrected drawings be approved and made a part of the record of the above-identified application.